ASHBURTON LEARNING VILLAGE, CROYDON

Client: Ashburton Services Limited
Architect: Penoyre & Prasad
Consulting Engineer: Curtins Consulting Engineers
Quantity Surveyors: Gleeds
Value: 20.2M
Duration: February 2005 – August 2006

A new 10,200m^2 'Learning Village' comprising new teaching and administration spaces, sports facilities and play area for the following services:

- Ashburton Community School (1200 pupils)
- Ashburton Library and associated services
- The Continuing Education and Training Service
- The Croydon Music Service

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The project has been described by George Ferguson, former president of the Royal Institute of British Architects, as "setting a new design standard for schools".

The Facilities

Facilities include:

- a three-storey school building with modern, high-tech classrooms and science laboratories
- a flexible hall, which can be used as a single space, with a stage and auditorium, or divided into two separate spaces, the stage as a fully-functioning dance studio with sprung floor and wall mirrors and the hall with lighting rig, sound equipment and control room
- all-weather, floodlit sports pitches and multi-games area
- sports hall and extra gym and exercise areas, with changing rooms
- sound-proof music practice rooms and recording studio with all the latest technology
- a modern, loan and reference library with computers, wireless access to the internet and a children's area

Environmental Efficiency

With much emphasis placed on the need for environmental efficiency, the facility produces at least ten percent of its energy from on-site renewable resources, these include:

- the largest amount of photovoltaic cells to be installed in a building in the UK (left inset, above), supported by a grant of £107,000 from the DTI
- movement-sensitive automatic lights
- sun tubes for rooms without windows – these polished chrome cylinders are fitted in the ceiling and protrude from the roof and, with the help of micro prism glass, they magnify the natural light coming into the room
- floor-to-ceiling windows and sky lights in the library which again reduce the need for electric lights
- a brise soleil (main picture) - a permanent blind that stops glare from the sun but allows daylight into rooms, installed on the outside of the library windows
- a rain water tank to feed toilets and service sinks (Rainwater Monitor shown in right inset, above)
- air-pressure tests to ensure the building's heat insulation reaches the required standard

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"The learning village will become a true beacon of excellence in our community. Apart from its huge potential in terms of education, it is significant that the building has taken sustainable energy seriously. It points to a better future, not only for education but also for clean energy."

MALCOLM WICKS MP
MINISTER FOR ENERGY

The Importance of the End User

We involved all parties from the very early stages of the project and designed the facilities to perfectly meet the end-users' requirements – right down to details such as the location of filing cabinets, notice boards and power points.

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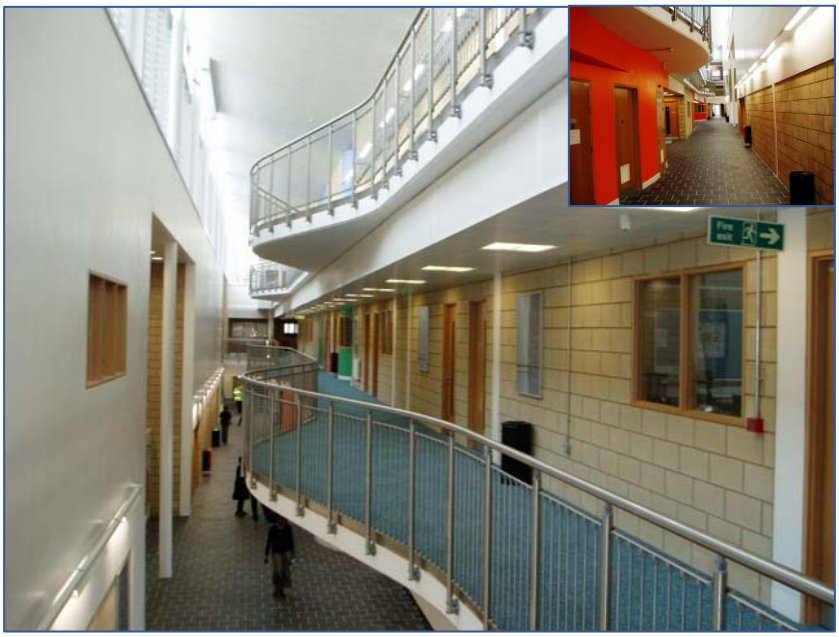
"I would like to congratulate all who have been involved in the planning and building of Ashburton Learning Village. It demonstrates the effectiveness of partnership working and marks a huge step forward in our commitment to providing first-class learning facilities for people of all ages."

TONY NEWMAN
COUNCIL LEADER



The Interior

The school is planned around a central triple height concourse to provide access to classroom areas and school halls. The concourse itself is lit by Clerestory glazing. The majority of classrooms are located in two three-storey teaching wings. Glazed screens and retractable walls to some science rooms provide controlled views into the teaching areas. Staff offices are distributed throughout the school to reflect the management ethos of the school.

The main school office and reception is positioned to monitor the pupil entrance, school entrance foyer and central concourse. A variety of internal finishes are designed to limit the acoustic treatment between rooms and control reverberation times to improve audibility and reduce noise.

External Works

The external works comprise an open piazza to make it easier for large numbers of people to enter and leave the building, hard play areas for active use during the break and lunchtime periods and quiet courtyard style sitting areas. The playing fields comprise multi-use games areas (for tennis, netball and five-a-side-football) and an all-weather sand filled playing surface for a full sized hockey pitch and markings for a football pitch. There is also an informal wildlife corridor and a nature area.

Public parking spaces for disabled users and the library are adjacent to the piazza with school staff and out-of-hours visitor parking in a secure, controlled area.

The Library

The main library space is a tall single volume with a full height glazed frontage. The main elevation is screened with louvres to control unwanted solar gains and glare and presents an attractive and welcoming public face to the facility. The Library Service has requested that the facility is planned on one level, to allow the principal library areas to be controlled from a single reception located immediately off the main public entrance to the Learning Village.

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"Ashburton Learning Village will provide an inspiring personalised education, tailored to the needs of young people. It will provide 21st Century facilities to enable young people to reach their full potential. The entire community will benefit from the resources as they are available for use after school hours, at weekends and during school holidays."

RUTH KELLY MP
EDUCATION SECRETARY

Communication with the School

As we were working so closely to the existing school it was critical that we undertook our works with consideration to the school activities. We met the school on a weekly basis to advise them of our forthcoming construction activities, identifying any potential disruptions. Where possible, we re-sequenced works to fit in with the school.

For example, we avoided using the vibration rollers close to the building during their exam times. We spent the mornings receiving and positioning the stone and rolled it from 2.30pm once the school lessons had finished. Some sections of the demolition that were extremely close to the school were undertaken during the holidays to avoid disrupting school activities.

Single Point of Contact

For the duration of the project, we nominated one member of staff as a single point of contact for the school to discuss any issues.

Site Establishment

Our site establishment was arranged to ensure that we were completely segregated from the school, with secure fencing and access routes. A segregated access was made into the existing school on a completely different road from our site access to ensure construction traffic did not pose a health and safety risk to the school users.

We erected clear signage advising of the site works and leafleted the area so everyone was aware of the works that we were undertaking and were clear on any new access arrangements.

Ensuring School Safety

School safety was high on the design brief and all areas have been made secure with the use of card keys. Everyone entering the building must do so through the main reception. Locked areas are automatically deactivated if the fire alarm should go off.